

2

REMARKS

Examiner's comments are noted, but Applicant strongly disagrees with the conclusions Examiner has drawn. Indeed, the prior art is entirely different from the invention as claimed, and the comments Examiner has made are utterly irrelevant to the language used in the present claims.

Applicant also notes that Examiner has provided no indication that he has considered any of the detailed and highly pertinent comments supplied by Applicant with last response. In this regard, Examiner is reminded of MPEP 707.07(f), in which it is stated that where "the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." Examiner may suggest that the present rejections are in fact essentially new since they incorporate a new piece of prior art. However, Applicant points out that most, if not all, comments made in the previous report as to the failure of Westerman to anticipate the specific features of the present claims are still entirely relevant. The inclusion of Hagihara does not overcome the gross failure of the citations, and Westerman in particular, to disclose the presently claimed features, contrary to Examiner's assertion.

By way of example, Examiner has suggested that "Westerman teaches a multi-touch surface apparatus for detecting special arrangement on the surface, which includes a digital code". With respect, how is this relevant to the present claims, which are concerned with sensing device that can be attached to a writing implement? Examiner then points out that "Westerman teaches an array of proximity sensor means embedded in surface, scanning means for forming digital proximity images from proximities measured by the sensing means, image segmentation means and control tracking as well as identification means". Again, none of this is relevant to any of the present claims.

Examiner then goes on to suggest that "Westerman teaches the use of a multi-touch surface having coded data disposed on the surface and associated detection means". Again, this assertion indicates a failure to comprehend what is being claimed, and/or a failure to understand how the prior art operates.

Applicant reminds Examiner that the purpose of Examination is to determine the scope of the claimed features, and then to determine whether each and every one of those features is

present in the prior art. In the present case it seems Examiner has determined a general "gist" of the invention and has sought to identify this gist in prior art citations.

There are a large number of features in the claims that are not present in the citations. Also, Examiner has entirely failed to provide even a prima facie case for combining Westerman with Hagihara, let alone demonstrated that any such combination could in any way anticipate the present invention.

To assist Examiner in understanding this, Applicant will now go through claims on a feature-by-feature basis. The italicised text is quoted directly from the claims, whilst the bullet points after each feature are Applicant's comments.

1. *A sensing device for use with a surface having coded data disposed on the surface,*
 - If, for the sake of argument, one considers the "shading line" of Hagihara to comprise coded data (and applicant strongly rejects that anyone skilled in the relevant art would read "coded data" in such a way), it is acknowledged that Hagihara discloses such a device. The device takes the form of a scanning mechanism that is used to detect a width of a manuscript being scanned.

the coded data being indicative of an identity of a region associated with the surface,

- Using Examiner's definition of the coded data being a "shading line", it is clear that the shading line is in no way "indicative of an identity of a region associated with the surface". Applicant points out that the language of the claim specifically defines "data", which means information. It is therefore necessary, according to the language of the claims, that the data (or "information") encoded in some way on the surface be indicative of an identity of a region associated with the surface. Examiner is respectfully requested to explain how a region of the surface is in any way identified in Hagihara using the shading line.

said device including detection means arranged to detect the coded data

- Using Examiner's definition of the sensing device in Hagihara, the detection means must be the scanner.

and to generate region identity data indicative of the identity of the region using the coded data,

- Nowhere in Hagihara is there any suggestion of region identity data being generated.

and attachment means for facilitating attachment of the device to a writing implement.

- This is a critical feature of the present invention, and yet Examiner has utterly failed to even mention its existence in the claims in the last two reports.
- Hagihara is concerned particularly and exclusively with a reader for an automatic document feeding and scanning system. The scanner is used to determine a width of the text to be scanned as the document is fed into the scanner. There is no way that the device in Hagihara can be attached to "a writing implement", as is required in this claim. Indeed, the entire arrangement of Hagihara, being a fixed scanning system for automatically fed documents, teaches squarely and strongly away from attachment to a writing implement.
- Westerman is concerned exclusively with using scanning devices embedded in a touch surface to determine a position of fingers or stylii relative to that surface. The sensor is embedded in large touch surface (see figure 1), and there is no disclosure of any attachment means for attaching the sensors in the touch surface to a writing implement. Moreover, the entire arrangement of Westerman teaches squarely and strongly away from the concept of having a sensing device attached to a writing implement, since Westerman is concerned with sensing the movement of passive devices (eg, fingers, passive stylii) on the surface.

2. *A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment and detachment of the device to a writing implement.*

3. *A sensing device as claimed in claim 1, wherein the attachment means is a clamp.*

- In claims 2 and 3, the attachment feature is expanded to be detachable, and more specifically to be a clamp. In relation to these claims, Examiner has referred to a number of features in Westerman that appear wholly unrelated to these claims. What is Examiner talking about when he refers to "identification processes", "chord motion event generation" and "attachment of... motion units"? These have utterly nothing to do with attaching "the sensing device" to a "writing implement". Has Examiner even read the text that relates to the features referred to? Features 678 and 680 are steps in a procedure that relate to the integration of velocity components over time and determining if the number of units of motion is greater than 1. In what way is this "attachment" of a "sensing device" to a "writing implement"? Perhaps

5

Examiner has confused the reference numbers, because the features referred to by Examiner are entirely unrelated to anything in claims 2 and 3.

- Given Examiner's identification of the sensing device in Westerman as being the embedded sensors of the touch surface, there is utterly no disclosure of that sensing device being attachable in any way to a writing implement. Examiner is requested to either withdraw this aspect of the claim rejections or point out where and how the citations disclose the claimed features.

4. *A sensing device as claimed in claim 1, further including means for ensuring correct orientation of the device when the writing implement is held by a user during use.*

- Again, Applicant is unable to understand how Examiner has concluded that Westerman discloses the features of this claim. The portions referred to by Examiner disclose, at best, that contact orientations of a finger are detected in Westerman. However, this is not the same as ensuring correct orientation of the device, as claimed here. Examiner is respectfully requested to identify where in Westerman there is disclosed a means for ensuring correct orientation of the device, or to withdraw this rejection.

5. *A sensing device as claimed in claim 4, wherein said means for ensuring correct orientation of the device is a grip portion configured so as to correspond with a portion of a user's hand.*

- Westerman discloses no such feature. Examiner suggests that the sensing of a pen grip configured by user's thumb and forefinger is equivalent to the features defined in this claim. Examiner is requested to either explain how sensing of a particular grip in any way ensures correct orientation of the device, or withdraw this rejection.

6. *A sensing device as claimed in claim 1, further including calibration means for calibrating the device such that information indicative of the distance between a writing portion of the writing implement and the detection means is incorporated into said region identity data.*

- Even if Westerman were to disclose the features mentioned by Examiner in relation to claim 6, how is this a "calibration means"? Simply detecting a distance is not the same as calibrating a device.
- Moreover, the distance between the touch device and sensing electrode mentioned by Examiner is not what is being claimed in claim 6. Claim 6 is about determining an

6

offset between the writing point of a writing implement and the detection means. This is in recognition of the fact that the sensing device may not sense the coded data at precisely the point where the writing point of the writing implement contacts the surface. To accurately determine where the point is, it is therefore necessary to determine an offset value. That is what is defined in claim 6, but there is nothing equivalent in Westerman. Indeed, there is no need for such an offset because position sensing is based on the actual sensed position of a user's finger on the touch surface. There is therefore no need for any offset to be determined. Examiner is again requested to explain how Westerman is relevant to this claim or to withdraw this rejection.

7. *A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment of the device to a pen or marker.*

8. *A sensing device as claimed in claim 1, wherein the attachment means is adapted to facilitate attachment of the device to a pencil.*

- Examiner's comments in relation to claims 7 and 8 do not make any sense. In what way does sensing the shape of someone's hand and fingers equate to "attachment means", let alone disclose that the attachment means allow the device to be attached to a pencil? There is no attachment means shown anywhere in Westerman, nor is there disclosed any pen, pencil or marker. How can the features of claims 7 and 8 therefore be said to be disclosed in any way?

9. *A sensing device as claimed in claim 1, further including motion sensing means configured to generate movement data indicative of movement of the sensing device relative to the region.*

- Movement data is generated in Westerman, but not movement of a sensing device (as defined) relative to a surface. The only movement in Westerman is movement of a finger or stylus, which is determined using embedded sensors. This is not, however, movement of "the sensing device relative to the region". Is Examiner now suggesting that the sensing device is a finger?

10. *A sensing device as claimed in claim 9, wherein the motion sensing means is configured to generate the movement data using the coded data.*

11. *A sensing device as claimed in claim 9, wherein the motion sensing means includes at least one acceleration sensing means, the acceleration sensing means being configured to sense acceleration of the sensing device as the sensing device moves relative to the region, the motion sensing means being configured to generate the movement data by periodically sampling the acceleration.*

12. *A sensing device as claimed in claim 11, wherein the acceleration sensing means is configured to sense at least two substantially orthogonal components of acceleration.*

- The comments in relation to claim 9 apply to claims 10 to 13.

13. *A sensing device as claimed in claim 1, wherein the coded data includes a plurality of tags, each tag being indicative of an identity of a region within which the tag lies.*

- Examiner continues to use "gist"-based arguments to make his point. Claim 13 defines that the coded data includes a plurality of tags. Examiner has mentioned the conversion of "voltage data into digital code", but does not even attempt to explain a relationship between a tag, as claimed, and the disclosure of Westerman. What is the "tag" in Westerman?

14. *A system for capturing information applied freehand, said system including a sensing device as claimed in claim 1, and a surface having coded data associated with the surface.*

- The comments above apply in relation to this claim.

OTHER ISSUES

Not only do Westerman and Hagihara entirely fail to disclose the features of the present invention, Examiner has entirely failed to explain how or why one would seek to combine the disclosures.

Westerman teaches a touch surface for allowing data to be input to a computer system by a user, using a combination of touches with the fingertips.

Hagihara teaches an automated document scanning process for inputting documents into a computer using a scanner and document conveyor.

8

Examiner has proposed that it would be obvious to "modify Westerman's method of inputting system to adapt Hagihara's use of binary coded data". With respect, this suggestion is nonsensical. Hagihara scans image data from a document and inputs the scanned binary data into a computer. Is Examiner suggesting that the touch surface of Westerman be modified to enable scanning of documents? Or is Examiner suggesting that the linear scanning mechanism of Hagihara could in some way be used to determine user finger position if it was somehow implemented in a touch surface?

Examiner goes on to say that "One would have been motivated in view of the suggestion in Hagihara that the use of binary coded data on the white plate is functionally equivalent to the desired use of coded data disposed on the surface". What "desired use"? In what way are these features "functionally equivalent"? Examiner has provided no explanation of what these statements even mean, let alone any support for their relevance to the present invention as claimed.

Finally, Examiner mentions that "The use of binary coded data helps function an image reader as taught by Hagihara". What does this mean? Yes, Hagihara teaches an images reader, but how is that relevant to the present invention as claimed? And why is the teaching of an image reader in Hagihara relevant to the touch surface of Westerman? Is Examiner suggesting that all the functionality of Westerman in terms of proximity sensors and recognition circuitry be removed and replaced by the scanning element of Hagihara? If so, how would this be achieved? And how would the combination anticipate the present invention as defined in any of the claims?

Applicant submits that the present Office Action is inadequate and entirely fails to even put forward a prima facie case for the relevance of the citations to the patentability of any of the claims in the present application. Moreover, many of the issues raised in Applicant's last response seem to have been entirely overlooked by Examiner, presumably due to the introduction of Hagihara.

Applicant submits that it is reasonable to expect that any issues reiterated in a second Office Action will go to the heart of any remaining rejections and that Applicant's previous arguments will have carefully been considered before issuance of such an Action. In this case, Examiner has clearly failed to grasp even the fundamental issues at hand, notwithstanding the clear and detailed comments made by Applicant with last response. In

9

the event Examiner fails with the next Office Action to carefully and completely consider the issues again raised by Applicant, Applicant will have no option but to investigate formal complaint procedures in relation to this matter.

1

10

CONCLUSION

It is respectfully submitted that all of the Examiner's objections have been successfully traversed. Accordingly, it is submitted that the application is now in condition for allowance. Reconsideration and allowance of the application is courteously solicited.

Very respectfully,

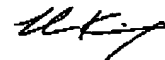
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